

4/16 clm. set

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in this application:

Claims 1-30. (Cancelled)

1 31. (Currently Amended) A pharmaceutical composition for bone elongation or treating skeletal dysplasias comprising at least one natriuretic peptide variant, the peptide being set forth in SEQ ID NO:5 wherein Xaa=Leu, Ile, Val; Xbb=Lys, Leu, Met; Xcc=Leu, Ile, Ala, Val; Xdd=Ser, Ala, Gly, Thr, Asn; Xee=Met, Ala, Trp, His, Lys, Ser, Gly; Xff=Gly, Lys, Ala, Leu; and Xgg=Leu, Met, and a carrier or excipient, wherein SEQ ID NO:5 is other than amino acid sequence set forth in SEQ ID NO:2.

Claims 32-35. (Cancelled)

2 36. (Original) The pharmaceutical composition according to claim 31 further comprising an inhibitor of the natriuretic peptide clearance receptor.

3 37. (Original) The pharmaceutical composition according to claim 31 further comprising an inhibitor of the neutral endopeptidase 24.11.

4 38. (Original) The pharmaceutical composition according to claim 37 wherein the inhibitor of neutral endopeptidase 24.11 is thiorphan or candoxatril.

5 39. (Previously Presented) The pharmaceutical composition according to claim 31 further comprising an inhibitor of fibroblast growth factor receptor 3 tyrosine kinase.

6 40. (Currently Amended) [[A]]The pharmaceutical composition according to claim 31 wherein the comprising a natriuretic peptide is fused to a carrier protein forming a natriuretic peptide-carrier protein fusion protein; wherein the carrier protein is a bone growth plate-specific protein selected from the group consisting of growth hormone (GH), insulin like growth factor-1 (IGF-1) and thyroid hormone (TH).

7 41. (Original) The pharmaceutical composition according to claim 40 wherein the carrier protein comprises growth hormone.

8 ~~42~~ (Previously Presented) The pharmaceutical composition according to claim ~~40~~ wherein said at least one natriuretic peptide is conjugated to a carrier protein forming a natriuretic peptide-carrier protein conjugate.

Claims 43-66. (Cancelled)

9 ~~67~~ (Withdrawn, Currently Amended) A method for increasing the size of a bone growth plate in ~~abnormal~~ a bone comprising treating the bone in vitro with an effective amount of at least one natriuretic peptide in a pharmaceutical composition according to claim ~~31~~. 1

Claims 68-71. (Cancelled)

10 ~~72~~ (Withdrawn) The method according to claim ~~67~~ further comprising inhibiting the natriuretic peptide clearance receptor. 9

11 ~~73~~ (Withdrawn) The method according to claim ~~67~~ further comprising an inhibitor of the neutral endopeptidase 24.11. 9

12 ~~74~~ (Withdrawn) The method according to claim ~~73~~ wherein the inhibitor of neutral endopeptidase 24.11 is thiorphan or candoxatril. 11

13 ~~75~~ (Withdrawn) The method according to claim ~~74~~ wherein the step of administering an inhibitor of neutral endopeptidase is performed simultaneously with the step of administering an effective amount of at least one natriuretic peptide. 12

14 ~~76~~ (Withdrawn, Currently Amended) The method according to claim ~~67~~ further comprising an inhibitor of fibroblast growth factor receptor 3 tyrosine kinase. 9

15 ~~77~~ (Withdrawn, Currently Amended) The method according to claim ~~68~~ wherein said at least one natriuretic peptide is fused to a carrier protein forming a natriuretic peptide-carrier protein fusion protein wherein the carrier protein is selected from the group consisting of growth hormone (GH), insulin like growth factor-1 (IGF-1) and thyroid hormone (TH). 9

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16 ~~78~~. (Withdrawn) The method according to claim ~~77~~¹⁵ wherein the carrier protein fusion protein comprises growth hormone.

17 ~~79~~. (Withdrawn) The method according to claim ~~67~~⁹ wherein said at least one natriuretic peptide is conjugated to a carrier protein forming a natriuretic peptide-carrier protein conjugate.

18 ~~80~~. (Withdrawn) The method according to claim ~~67~~⁹ wherein the bone is a limb bone.

19 ~~81~~. (Withdrawn) The method according to claim ~~80~~¹⁸ wherein the limb bone is an achondroplastic bone.

20 ~~82~~. (Withdrawn, Currently Amended) A method for elongation of an ~~abnormal~~ bone, comprising treating the bone in vitro with an effective amount of at least one natriuretic peptide in a pharmaceutical composition according to claim ~~81~~¹.

Claims 83-86. (Cancelled)

21 ~~87~~. (Withdrawn) The method according to claim ~~82~~²⁰ further comprising inhibiting the natriuretic peptide clearance receptor.

22 ~~88~~. (Withdrawn) The method according to claim ~~82~~²⁰ further comprising an inhibitor of the neutral endopeptidase 24.11.

23 ~~89~~. (Withdrawn) The method according to claim ~~88~~²² wherein the inhibitor of neutral endopeptidase 24.11 is thiorphan or candoxatril.

24 ~~90~~. (Withdrawn) The method according to claim ~~88~~²² wherein the step of administering an inhibitor of neutral endopeptidase is performed simultaneously with the step of administering an effective amount of at least one natriuretic peptide.

25 ~~91~~. (Withdrawn, Currently Amended) The method according to claim ~~82~~²⁰ further comprising an inhibitor of fibroblast growth factor receptor 3 tyrosine kinase.

24 92. (Withdrawn) The method according to claim ²⁰82 wherein said at least one natriuretic peptide is a natriuretic peptide fused to a carrier protein forming a natriuretic peptide-carrier protein fusion protein.

27 93. (Withdrawn) The method according to claim ²⁰92 wherein the carrier protein comprises growth hormone.

28 94. (Withdrawn, Currently Amended) The method according to claim ²⁰82 wherein said at least one natriuretic peptide is conjugated to a carrier protein forming a natriuretic peptide-carrier protein conjugate- wherein the carrier protein is selected from the group consisting of growth hormone (GH), insulin like growth factor-1 (IGF-1) and thyroid hormone (TH).

29 95. (Withdrawn, Currently Amended) The method according to claim ²⁰82 wherein the bone is a limb bone.

30 96. (Withdrawn) The method according to claim ²⁰82 wherein the limb bone is an achondroplastic bone.